APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,286	09/23/2004	Wolfgang Keil	2002P05160WOUS	3698

7590   04/25/2007

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EXAMINER
LI, GUANG W

ART UNIT	PAPER NUMBER
2109	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	**Applicant(s)**
Office Action Summary	10/509,286	KEIL, WOLFGANG
	Examiner	**Art Unit**	
	Guang Li	2109	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *20-38* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *20-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09/23/2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *09/23/2004*.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Specification

1.   Applicant is reminded of the proper language and format for an abstract of the disclosure.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   Claim(s) 20-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Sitaraman et al. (US 6,427,170) in view of Droms et. al. "DHCP Failover Protocol".

Sitaraman teaches an authentication, authorization and accounting (AAA) Server

provides dynamic IP allocation.

4.   Regarding claim 20, Sitaraman et al. teaches a method for updating information

in an AAA (Authentication, Authorization, Accounting) server system (see Abstract; col.4

lines 6-13; col.6 line 30) that comprising regular sending an updating message

(Periodically publishes content to the server see FIG.2; col.4 line 67; col.7 line 50; col.8

line 48) to all the other AAA servers of the AAA server system, wherein the updating

message (Updating server for every transaction see col.4 line 40) comprises information

about changes (Returned Packet contain the information of logical address see col.13

lines 26- 48), performing a estimation of logical address which will be issued time period

(expiration time to a database for IP address allocation event see col.14 line 15)

between the updating message which is about to be sent and a next following updating

message in the first AAA server, before the updating message is sent (Timer associated

with the database of accounting events expires, and protocol gateway publishing event

before accounting event published see col.14 lines 58-66).

5.   Sitaraman fail to teach information status of subset of an address pool which

assigned to first AAA sever, wherein from the logical address are taken will be issued in

the time period and information about which of further subsets have been determined.

6.   Droms teaches further subset of address pool (subset address pool in page 8

"subset address pool"), which are assigned to first AAA server, where the further

subsets the logical address taken, will be issued in the time period (Time

Synchronization between server see 5.10 page 30) and updated the server. It is

desirable to combine the AAA server system for managing a pool of logical address and

assigned partial amount of pool addresses to the users in the subsets. It would have

been obvious to one of ordinary skill in the art at the time of the invention was made to

use Sitaraman's AAA server system to include a logical assigned address into subnets

for the purpose in interchanging servers.

7.   Regarding claim 30, Sitaraman teaches an AAA (Authentication, Authorization,

Accounting) server system comprising a pool of logical addresses, administrating the

pool of logical address and the logical addresses assigned to a terminal device only by the one server (col.4 line59), However, Sitaraman fails to teaches the subset of the address pool to be exactly one AAA server. Droms teaches a primary server that examines the balance of the available addresses between the primary and secondary for a particular address pool whenever the number of available addresses for either the primary or secondary changes. This will be avoided assigning two subnets to each AAA server. It would have been obvious to combine the AAA server system to administer a pool of logical addresses with each of disjoint subsets to assigned to only one AAA server for duplicate IP address pooling.

8.   Regarding claim 21, Sitaraman teaches the estimation is made by forming the product of the maximum rate at which AAA server can process requests fro the issues of the logical address and the time period (Timer associated with the database of accounting events expires, and protocol gateway publishing event before accounting event published) between the updating message which is about to be sent and the next following update message.

9.   Regarding claim(s) 22 and 23, Sitaraman teaches checking by the first AAA server whether the address pool, which will be issued according to the estimate are available (dynamic IP address server leases an available IP address of the IP address pool to the protocol gateway see col.8 line 3), but fails to teaches if the result of the checking by the first AAA server is negative, assigning a subset of address pool assigned to another AAA server to the first AAA server. Droms teaches checking the primary server should examines the available address between servers fro a particular

address pool whenever the number of available address for when server changes

(Page 27). It would have been obvious to one of ordinary skill in the art at the time when

invention was made to include divide up the address pool into subsets for interchange

purpose.

10.   Regarding claims 24 and 25, Sitaraman teaches IP address allocation maintains

a database of IP address of the IP address pool to the protocol gateway (col.8 line4),

but fail to include wherein the event of the failure of the first AAA server, the subsets of

the address pool which are assigned to the first AAA server are assigned to a second

AAA server. Droms teaches when first server failure, primary server sends a packet to

the second server. An IP address available for allocation on a Primary server has state

Free and an IP address available for allocation on a secondary server has state backup

(Page4). It would have been obvious to one of ordinary skill in the art at the time when

the invention was made for AAA system to include secondary server for backup

purpose protection against primary server malfunction.

11.   Regarding claims 26-28, Sitaraman teaches second AAA server is determined

according to a priority list of AAA servers (Priority loading from the local cache then

primary cache see FIG. 3) and the time at which the IP address was allocated, but fail to

teach when the AAA server fails, the further subsets of the address pool will to used for

the issuing of logical address for a period of time and wherein the subsets of the

address pool which are assigned to the first server area assigned to second server.

Droms teaches secondary sever is determined according to a priority of AAA servers

where the secondary server is the backup of the primary server. It would have been

obvious to one of ordinary skill in the art at the time when the invention was made to

determined the period of time to reset the IP pooling address when server failure for

efficient allocation of resource of logical address.

12.   Regarding claim 29, Sitaraman teaches the length of the time period is

determined using time_to_live field gives an indication of how stable the record is, but

fail to teach what is the maximum permissible connection time. Droms teaches the

length of that timeout cannot be set on per-connection basis, and it frequently as long

as nine minutes and as short as two minutes. It would have been obvious one of

ordinary skill in the art at the time when the invention was made for the AAA server

system to specify a default period of time to reestablish the connection.

13.   Regarding claims 30-33, Sitaraman teaches a method of AAA server to

transmitting a multicast message to all the other AAA server of the AAA server system

(Periodically updated publishes content to the server see FIG.2; col.4 line 67; col.7 line

50; col.8 line 48) by the second AAA server, where the multicast message requests the

dispatch of updating messages, but fail to teaches when rebooting a second AAA server

will assigned subsets of the address pool to the AAA servers. Droms teaches when

server initialized in the startup state, server dispatch an updating message with all the

subset address pool of the first AAA server to first AAA server. It would have been

obvious one of ordinary skill in the art at the time when the invention was made to

update the first AAA servers when a second server failure. It will help the first server to

get latest information of the address pooling for better IP management.

14.   Regarding claims 34-37, Sitaraman teaches AAA system, where the RADIUS

protocol is used as the transport protocol for the communication of updating messages

The protocol gateway is a product, device or collection of device and software products

that can host a variety of industrial standard protocol such as RADIUS (Remote

Authentication Dial-In User Service), DHCP (Dynamic Host Configuration Protocol),

TACACS, SNMP and the like (FIG. 6A; col.6 line 52).

15.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Guang Li whose telephone number is (571) 270-1897.

The examiner can normally be reached on Monday-Friday 7:30AM-5:00PM(EST).

    If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jeff Pwu can be reached on (571) 272-6798. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

    Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JEFFREY PWU
PRIMARY EXAMINER